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J. K. Hartman  
June 18, 1993  
93-RF-7061  
Page 2

conducted under the terms of the Land Disposal Restriction Federal Facility Compliance Agreement (LDR FFCA). It appears that the EPA and CDH representatives were adamant in their opinion that F039 does apply to the ITS water utilizing the definitions of both 40 CFR 261 and 6 CCR 1007-3, Section 261.

#### PROPOSED ACTIONS

EG&G is prepared to implement the Action Plan contained in Attachment 1 according to the timetable outlined. EG&G will begin implementation of the Action Plan unless the U. S. Department of Energy (DOE) directs EG&G, in writing, to cease efforts. Attachment 2 is included as an aide should DOE decide to pursue additional discussions of non-applicability with EPA and CDH. Please note the following issues in making your decision:

- (1) F039 is probably not applicable to the ITS water under EPA's definition.
- (2) CDH indicated at the October 27, 1992, Program Manager's Meeting that their definition of F039 was intended to reflect the EPA's definition and must be at least as restrictive (may be more restrictive than EPA).

#### PROJECTED COSTS

Projected costs for the implementation of F039 to the Rocky Flats Plant will be developed during the implementation of actions No. 3 and 4 and during the development of FY94 Work Packages.

#### CONCLUSION

Significant discussion as to the applicability of F039 has occurred over the last year. The ITS water was originally declared as F039 without assessing the full range of possible interpretations. Upon further review of the facts surrounding this issue, it is EG&G's position that F039 may not apply to the ITS water.

Although the EPA and CDH appear to firmly believe F039 is applicable, EG&G is convinced that one more informal attempt could be made to convince the regulators that F039 should not apply to this particular scenario. F039 was originally developed to address situations where other regulatory controls may not have been adequate. If leaks and releases can be addressed adequately within the remainder of the regulatory framework, application of F039 is not necessary. F039 was also developed to provide an enhanced mechanism for protecting human health and the environment from landfill situations. As a result, the following questions must be asked: (1) Does the application of F039 to ITS water enhance the effectiveness of existing and/or proposed Solar Pond remediation actions? (2) Is there benefit to human health and the environment gained by assigning F039 to the ITS water? If no benefit is realized, application of F039 could be considered outside the scope of intent of the Resource Conservation and Recovery Act regulations, and could result in unnecessary expenditure of limited program funds.

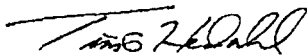
J. K. Hartman  
June 18, 1993  
93-RF-7061  
Page 3

If the State later conforms its regulations to the existing federal regulations, the status of F039 should be reevaluated at that time.

It is important to resolve this issue at this time since EG&G is currently preparing FY94 Work Packages and the funding for many of the actions listed needs to be determined within the next month. Many of the actions listed have TBD (to be determined) as a completion date since additional discussions are required during the formulation of the FY94 Work Packages to determine these dates.

In summary, a valid argument (or arguments) can be made that F039 does not apply to the ITS water as described in Attachment 2 to this correspondence. With your concurrence and direction, we are prepared to either: (1) present a comprehensive briefing to the regulators with the arguments in Attachment 2, (2) request outside counsel review of this matter, or (3) proceed with the actions outlined in the Attachment 1. Please advise and direct.

If you have any further comments or questions, please contact Scott Anderson at 273-6164.



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Environmental and Waste Management  
EG&G Rocky Flats, Inc.

BLL:rsp

Orig. and 1 cc-J. K. Hartman

Attachments:  
As Stated (3)

## ATTACHMENT 1

<u>ACTION</u>	<u>RESPONSIBLE INDIVIDUAL</u>	<u>COMPLETION DATE</u>
1. Evaluate all other Waste Mgmt. activities for F039 applicability write report.	P. Edrich/ B. Bruninga	June 15, 1993
2. Evaluate all other Environmental Management activities for F039 applicability.	W. Busby/ M. Buddy	June 15, 1993
3. Develop cost and schedules for relabeling of all pondcrete, saltcrete and vacuum filter containers.	R. James/ K. London	June 11, 1993
4. Develop cost and schedules for relabeling of other wastes identified by (1) above.	R. Morgan/ B. Trop	August 15, 1993
5. Complete work plan modifications to reflect F039 treatment standards for (2) above.	W. Busby/ M. Buddy	Sept. 1, 1993
6. Modify permits and permit application to reflect addition of F039.	P. Edrich/ B. Bruninga	TBD
7. Modify Solar Ponds Waste Sampling and Analysis Plan to reflect addition of F039.	S. Keith/ V. Church	TBD
8. Modify all other RF waste analysis plans to reflect addition of F039.	V. Church	TBD
9. Modify Solar Pond project treatability studies to reflect F039 and plan treatment accordingly.	S. Keith/ K. London	C Pond - 1/94 (if applicable) A/B Pond - TBD Remix - TBD
10. Modify plant operating records for re-labeling containers (based on result of (3) and (4) above.	D. Frawley/ D. Castro	TBD
11. Contact NTS requesting incorporation of F039 into permits/ Waste Sampling and Analysis Plans. Write "Application to Ship"	S. Keith/ G. Hickie	TBD
12. Prepare work package(s)/BCP to obtain funding to perform (1) - (11)	All of above	TBD

## ATTACHMENT 2

The following information is provided to allow informed decisions to be made regarding future discussions with the regulators on F039 applicability to ITS water. If you feel this information is insufficient to request concurrence from the regulators that F039 should not apply to ITS water, EG&G is prepared to follow the plan of action contained earlier in this correspondence.

### POINT 1 - DISTINCTION BETWEEN EPA AND CDH DEFINITION OF F039

- EPA defines F039 as "Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of this part" (56 FR 3877).
- CDH defines F039 as "Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D of these regulations"
- Because EPA specifically limited the scope of F039 to disposal it appears that the intent of F039 is meant to apply specifically to disposal and not treatment/storage.

### POINT 2 - SOLAR PONDS ARE NOT INTENDED FOR DISPOSAL ACTIVITIES

- The Solar Ponds have never been identified or described as a disposal unit. In addition, the ponds have historically possessed interim status for treatment/storage but not for disposal.
- If "disposal" is applicable to the Solar Ponds this might be considered "disposal" of mixed wastes without a permit or interim status.
- If "disposal" is applicable, there are potential political and public relations ramifications related to the fact that RFP and the regulators have always maintained that disposal of mixed wastes does not occur at Rocky Flats.

### POINT 3 - INTENT OF APPLICABILITY OF F039

- Research into the promulgation of F039 leads to some insight into why F039 was developed. It becomes clear that F039 was not intended to apply to a situation like the Solar Ponds (which would ultimately become the potential source of F039). F039 was intended to apply in situations such as a conventional landfill where the source of contaminants is not well characterized and could in fact contain many known and unknown listed and characteristic wastes. Through a variety of chemical and physical processes that are expected to occur within the landfill, additional toxic constituents may be produced over time, resulting in a leachate that may or may not resemble the initial wastes placed in the landfill. In this case, F039 is intended to provide standards that are protective of human health and the environment for such situations in which a variety of "unknowns" may exist or may be generated within the landfill. In the case of the Solar Ponds, the wastes placed in the unit are very well defined and characterized. In addition, the ITS water has been fairly well characterized, as has pondcrete, saltcrete, and vacuum filter sludge, and the constituents in these wastes closely resemble the constituents found in the wastes originally placed in the unit. F039 was clearly not meant to apply to this situation.

#### POINT 4 - WASTE RELEASE (LEAKAGE) VS. LEACHATE

- A key element in the application of F039 is the concept of "leachate". Leachate is obviously the result of a leaching process. In general, various definitions describe leaching as a separation process where a liquid "solvent" passes through a solid. It then solubilizes or entrains some portion of the solid constituent, and leaves the boundaries of the solid for subsequent collection.
- In the case of the Solar Ponds, a different phenomena is probably occurring. The Solar Ponds consist of liquid from which a certain amount of solids have settled out internally over time. The settled solids are clearly not separated from the liquid (i.e., no separate container or physical boundary). The liquid and settled solids share the same waste codes and the same impoundment boundaries. The entire mass of material in the Solar Ponds is considered (and has historically been managed as) a single waste form, called "pond sludge". This single waste form has been identified as leaking from its impoundment boundaries and now requires remedial action. This leakage is of the waste itself and not from internal or external sources of water or liquid percolating through or draining from the waste. This situation can be depicted graphically as shown in Attachment 3.
- The Solar Ponds are exposed to natural precipitation. This precipitation becomes mixed with the existing waste within the Solar Ponds, and under these conditions, the precipitation can not be described as "percolating through" or "draining from" the waste. Precipitation adds to and increases the volume of waste already in the Solar Ponds, but does not serve as a "solvent" for the purposes of F039.
- Assuming the Solar Ponds are treatment/storage facilities, the waste should be considered to be leaking from the unit rather than resulting from a leachate, in which case the ITS water would simply assume the hazardous waste codes of the wastes in the ponds, but not F039.
- This argument can be further supported by the fact that the Solar Pond remedial action (corrective action) is currently being managed under the Interagency Agreement as a RCRA corrective action. Corrective actions are intended to respond to releases of hazardous waste.

It should be noted that the regulators maintain the opinion that hazardous waste leaks or spills on the land are considered "disposal" of hazardous waste. Accordingly, they feel that leakage out of the Solar Ponds is "disposal" of hazardous waste into the surrounding land. The Solar Pond water leaches through this "disposed" waste and once collected in the trench system should be classified as F039.

#### POINT 5 - IMPLEMENTATION COST

- As mentioned earlier, F039 probably applies under the State rule, while Points 1 - 4 above lead to the conclusion that F039 probably does not apply under the EPA rule.
- Verbal comments from CDH indicate they intend on modifying their definition to be consistent with EPA's definition.

- The length of time for CDH modification is unknown, and therefore it would normally be prudent for RFP to begin complying with F039 activities, including permit modifications for treatment and storage units in which F039 wastes are managed; re-labeling of contents of pondcrete, saltcrete, and vacuum filter sludge; modification of treatability studies for pondcrete/saltcrete resolidification to reflect the F039 treatment standards; added waste analysis requirements for all those wastes; and begin working with NTS to request their incorporation of F039 into their permits and waste analysis plan requirements.
- The activities described in the bullet above will result in significant, unbudgeted costs for compliance. If, however, CDH intends to conform to EPA's definition, then as previously stated, F039 would probably not apply. As a result, RFP would be required to "de-implement" those actions previously implemented, resulting in additional cost.
- It is often stated that cost is not a valid reason for non-compliance with RCRA, however, avoiding unnecessary cost is warranted given limited fiscal and manpower resources.

#### POINT 6 - APPLICABILITY OF F039 TO OTHER ACTIVITIES

- In addition to the ITS/Solar Pond situation, the applicability of F039 to other Environmental & Waste Management activities will be determined as a part of this plan as well as Environmental Management activities (e.g., other Operable Units [OUs] besides the Solar Ponds) regardless of which definition (CDH vs. EPA) of F039 is used. This results because:
  - 1) other OUs are different from the Solar Ponds in terms of disposal vs. treatment/storage.
  - 2) other OUs represent situations in which placement constituting "disposal" has occurred.
  - 3) other OUs represent situations in which leachate results from uncontained waste vs. leakage of a contained waste as in the case of the Solar Ponds.

Therefore F039 will have to become an ARAR for the various OUs in which "disposal" is deemed to have occurred in the past.

#### POINT 7 - DIFFERENCE BETWEEN SOLAR POND 207C AND 207A/B

- The Solar Ponds consist of two separate RCRA Interim Status Units. One is for 207C and the other is for 207A/B.
- ITS water has been placed in 207A/B, but has not been placed in 207C. Thus F039 does not apply to 207C regardless of its applicability to 207A/B.
- DOE's confirmation of the inapplicability of F039 to 207C is necessary to proceed with adequate planning for FY94.

### ATTACHMENT 3

